

Amendments to the Specification

Please amend the paragraphs that begin at page 9, line 4 as follows:

In other mixer embodiments, gain linearity can be further enhanced with different G_m cell configurations. For example, the differential pairs 84 of FIG. 3 can be replaced with the G_m cell 120 110 of FIG. 4 which is formed with a differential pair 122 112 of transistors in which degeneration resistors 123 113 are inserted before each emitter to enhance linearity.

In another example, the differential pairs 84 can be replaced with the G_m cell 130 120 of FIG. 4 which is formed with two differential pairs 132 122 and 133 123 that are cross coupled. In a configuration generally known as a multi-tanh doublet, each differential pair is formed with different emitter areas e and Ae wherein A is a number greater than one (e.g., 4) and is arranged so that transistors with areas e and Ae respond to the same side of a differential drive signal. Other multi-tanh arrangements can also be used, e.g., a multi-tanh triplet.